

No. 3.—*New Spiders of the Family Aviculariidae.*

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THE new genera and species described in the present paper were brought to light in studying the unworked collection of Aviculariidae that has been accumulating for many years in the Museum of Comparative Zoölogy; all the types and paratypes are in the collection of the Museum.

PYCNOTHELINAE, subfam. nov.

Eyes elevated on a distinct tubercle, in a single group; anterior median eyes much the largest.

Labium immovably fused with the sternum; spinules at apex few (or none).

Coxae of palpi long, not at all produced into an apophysis at the distal end; spinules present in an area at proximal end (or absent).

Chelicerae without rastellum.

Tarsi of legs with no unguiculi fasciulares; no inferior claw present; paired claws bearing each a double row of teeth.

No stridulating apparatus present.

Superior spinnerets short, contiguous or subcontiguous; distal article much shortest, nearly as broad as long, rounded. Inferior spinnerets small, contiguous or subcontiguous.

So far as known, tibia I in the male is without spur.

This subfamily has similarities to the Diplurinae, but differs conspicuously in having the labium immovably fused to the sternum and in the short contiguous superior spinnerets. In addition to the new Brazilian genus *Pycnothele*, described below, I think *Lycinus* of Thorell, described from Argentine, belongs here rather than in the Diplurinae where placed by its author, though the original description contains no statement as to the condition of the labium. The account of the spinnerets would indicate their agreement with those of *Pycno-*

thele. The very large anterior median eyes are a conspicuous character in both genera, which may be separated as follows:—

Anterior median eyes close together, less than their radius apart; spinules present in a group at proximal end of coxae of pedipalps and at least a few on labium; metatarsi I and II scopulate nearly to base.....Pycnothele, gen. nov.

Anterior median eyes widely separated, their diameter or more apart; no spinules present on coxae of pedipalps or labium; metatarsi I and II scopulate only at distal ends.....Lycinus Thorell.

PYCNOTHELE,¹ gen. nov.

Cephalothorax rather long, ovate; pars cephalica low, only moderately convex. Fovea thoracica transverse or slightly procurved.

Eye-tubercle prominent, convex. Anterior row of eyes strongly procurved, the eyes close together, clearly less than radius apart; median eyes very large, much exceeding the others, very close together and even nearer to the lateral ones. Posterior row of eyes straight or recurved; posterior lateral eyes not much removed from the anterior lateral eyes; posterior median eyes much the smallest.

Labium immovably fused with the sternum, a shallow transverse furrow at base; distally truncate; spinules across tip few.

Coxae of pedipalps long, not at all produced into an apophysis at distal end. Bearing a small patch of spinules at proximal end.

Tarsi of legs with no inferior claw; superior claws each with a double row of teeth. All tarsi scopulate to base. Metatarsi I and II scopulate to base or nearly so; metatarsi III and IV not at all scopulate. All legs strongly spined.

The anterior spinnerets are short, clavate, and contiguous. The posterior or superior spinnerets are short, not more than one third the length of the abdomen; the second article is shorter than the first, and the third is much shorter than the second, nearly as wide as long, and rounded.

In the male the tibia of leg I is without trace of spurs at distal end; metatarsus I cylindrical, slender and straight.

Type Species.—*Pycnothele perditus*, sp. nov.

¹ πικνός, close, compact, θηλή, nipple (spinneret).

PYCNOTHELE PERDITUS,¹ sp. nov.

Plate 1, fig. 1-4.

Type.—M. C. Z. 1. ♂. Brazil: Mendez, Rio Parahyba. Nathaniel Thayer Exped.

Paratype.—M. C. Z. 2. ♀. Brazil: Mendez, Rio Parahyba. Nathaniel Thayer Exped.

Integument of carapace, thorax, legs, palpi, and chelicerae chestnut, sometimes in part dusky. Pubescence of these parts brown of a bronze or copper lustre. Bristles of the legs short, obliquely inserted, dark brown in color. Abdomen with a thick velvety coat of brown pubescence; the bristles moderate or short in length, numerous, reddish brown of a somewhat copper cast.

Eye-tubercle broad; rather abruptly and considerably elevated. Eye-area nearly twice as wide as long (40:21). In the male the anterior row of eyes in dorsal view strongly procurved, a line passing through middles of median eyes running caudad of posterior edges of the lateral ones. Anterior median eyes very large, their diameter exceeding the long diameter of the lateral eyes in about the ratio 8:5; near one fourth their diameter apart and even closer to the lateral eyes. Posterior lateral eyes equal in size to the anterior laterals from which they are separated by about their radius. Posterior median eyes much smaller than the laterals, their long diameter being about three fifths that of the latter; about equidistant from the lateral and the anterior median eyes. A line tangent to the caudal margins of the two posterior eyes on each side runs almost directly transverse.

In what is identified as the female of this species the eyes are less close together and the anterior median eyes are relatively somewhat smaller. Anterior row with procurvature from above as in the male. Anterior median eyes with diameter exceeding that of laterals in only ratio 9:7; one third their diameter or slightly more apart, and one fourth their diameter from the laterals. Relations of eyes otherwise as in the male.

Labium broad; cuspules in a line across anterior end, few.

Cuspules or spinules on proximal end of coxae of pedipalps not numerous and the area covered by them small.

¹ *perditus*, lost.

The legs of the female conspicuously stouter than those of the male, with legs I and II stouter than III and IV, femur II being thickest.

Metatarsus I and II scopulate to base or nearly so; metatarsi III and IV not at all scopulate. Spines of legs numerous, those of metatarsi and tibiae III and IV especially being conspicuously numerous and stout. In the male metatarsus I is abruptly more slender than the tibia.

In the palpus of the male the tibia is short, narrowed distad. Bulb comparatively large; the spine very short, about one third as long as bulb, straight and needle-like; a thin keel-like plate arising on its ectal side at base and extending proximad as a wing upon the adjacent portion of bulb, and a similar wing on the corresponding caudal surface with several lower edges or keels between and parallel with these two larger ones.

Male (type). Total length cir. 29 mm.

Cephalothorax: length, 14.5 mm.; width, 12.2 mm.; length of pars cephalica 9.1 mm.

	fem.	tib. +pat.	met.	tar.	total
Leg I	12.2 mm.	16.8 mm.	11.1 mm.	5.8 mm.	45.9 mm.
Leg II	11.1	15.2	10.3	5.8	42.4
Leg III	11	14	12.1	5.2	42.3
Leg IV	14	18.2	17.8	6	56

Length of tibia I, 9.5 mm.; of tibia IV, 12 mm.

Female. Cephalothorax: length, 17 mm.; width, 13 mm.; length of pars cephalica, 10.7 mm.

	fem.	tib. +pat.	met.	tar.	total
Leg I	11 mm.	15 mm.	7.2 mm.	4 mm.	37.2 mm.
Leg II	10	13.2	7.1	4	34.3
Leg III	9.8	12.1	9	4	34.9
Leg IV	12	16.2	14	5	47.2

Length of tibia I, 7.8 mm.; of tibia IV, 9.5 mm.

ACTINOPODINAE.

ACTINOPUS XENUS¹ sp. nov.

Plate 1, fig. 5.

Type.—M. C. Z. 3. ♀. South America?*Paratypes*.—M. C. Z. 4. Three ♀♀. South America?

Integument of carapace and femora of legs dark shining chestnut, the chelicerae darker. The legs distad of the femora may be uniform in color with these or more or less abruptly lighter, more testaceous. Sternum and coxae of legs beneath more brown, of less reddish cast; the labium and coxae of pedipalps darker. Abdomen dark brown.

Pars cephalica anteriorly broad and convex; strongly narrowing caudad, the limiting furrows distinct. Fovea thoracica less than one third the width of the carapace. Pars thoracica depressed; a little in front of each caudolateral corner is a very deep and sharply defined depression which is typically elongate as a furrow subparallel with the caudal margin; a shallower continuation of the mesal end of the furrow sometimes bending cephalad and uniting with a median longitudinal depression of varying depth, this being contiguous anteriorly with the fovea thoracica.

Anterior row of eyes distinctly longer than the posterior. Anterior median eyes their diameter apart; three and a fourth times their diameter from the laterals. Anterior lateral eyes with diameter between 1.2 times that of the medians; twice their diameter from posterior laterals and 1.66 times their diameter from anterior margin of clypeus. Posterior median eyes with long diameter about .9 that of the anterior medians, smaller than that of the posterior laterals in ratio 6:7; only about .55 their diameter from laterals.

Sternum longer than wide (10:9). Anterior median depression distinct, with a weaker second depression caudad of it, or the two depressions continuous and deep. The usual three pairs of foveae converging to the depressed median area caudad of the primary anterior median depression. Hairs rather numerous on borders and anteriorly toward and over the labium.

Labium a little longer than wide; conspicuously narrowed distad; distally with numerous cuspsules as usual.

¹ ξένος, strange, foreign.

Coxae of pedipalps with numerous cuspules along the inner or anteromesal side as usual.

Posterior claw of all legs armed with a tooth at base, but that on claw of leg IV sometimes almost obliterated, that on other legs moderately large. Anterior claw unarmed or with a very small tooth near base. Leg I with 7 or 8 spines on anterior side of tibia and a band of numerous, mostly larger, spines on the posterior side, no spines on ventral surface of this joint; tarsus and metatarsus armed as usual. Leg II with tibia unarmed on the anterior side or ventrally, but with numerous short spines over entire posterior side as usual; metatarsus and tarsus as usual. Leg III with patella bearing 8 stout tooth-like spines in a series along distal margin dorsocaudally and a few proximad of this series, and on the anterior side a similar series also of about eight spines with proximad of it a rather irregular patch of about as many more; tibia with a similar series of spines on the distal margin on the caudal side, while on the anterior side the spines are more numerous than on the patella and the spinous area extends from the distal end proximad of middle of length; metatarsus dorsally with a longitudinal series of spines toward anterior side and with two or three series on the caudal side, some of the latter being strictly lateral, ventrally unarmed excepting for the pair of spines at distal end; tarsus with many spines over lateral surface and also ventrally; patella of third legs much longer than the tibia and the tibia wider than long. Leg IV with patella bearing many spines on anterior side over entire length, but with none at all on posterior side; tibia wholly unarmed; metatarsus unarmed ventrally excepting at distal end, on anterior side with about 8 spines in an irregularly double series extending from a point part way between base and middle to the distal end; tarsus with many spines beneath and especially on the anterior side.

Female (type). Total length; cir. 22 mm.

Cephalothorax: length, 9.8 mm.; width, 9.2 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	6 mm.	6.6 mm.	3.6 mm.	2.2 mm.	18.4 mm.
Leg II	5.9	6	3.5	2.2	17.6
Leg III	5.2	6	3.9	2	17.1
Leg IV	7	8.2	4.9	2	22.1

This species agrees with *A. caraba* Simon in having the first row of eyes longer than the second, but the difference is more decided; from the latter species it also differs in having the posterior median eyes

proportionately larger and less than their diameter from the laterals; and in having the claws of all the legs armed with a subbasal tooth. From *A. scalops* Simon, with which it has points of similarity, it differs in the inequality of the eye-rows above mentioned.

ACTINOPUS PRINCEPS,¹ sp. nov.

Type.—M. C. Z. 5. ♀. Brazil: Rio de Janeiro; Rio de Janeiro. Nathaniel Thayer Exped.

Carapace dark chestnut or somewhat reddish chocolate-color. Chelicerae nearly black, with fringe of bristles red as usual. Legs dark chestnut. Sternum and coxae of legs beneath a lighter chestnut. Labium and coxae of palps darker than the sternum. Abdomen brown, somewhat paler beneath.

Fovea thoracica deep, lunate, clearly more than one third the width of the carapace. A pit-like impression on each side just in front of the caudal margin.

Anterior median eyes less than their diameter apart (about five sixths), and near two and one fourth times their diameter from the laterals and about one and two thirds their diameter from the posterior medians. Anterior lateral eyes with long diameter twice that of the medians, and one and a half times that of the posterior laterals. Posterior median eyes with longitudinal diameter two thirds as large as that of the laterals from which they are separated by a little more than their radius. Anterior row of eyes a little longer than the posterior (38:35).

Sternum widest behind and narrowed cephalad as usual; equal in length and breadth. Anterior median fovea very deep and sharply depressed, widening cephalad. Paired foveae all elongate, their mesal ends narrowing and converging to the caudal end of median fovea where they meet; first pair on level with caudal end of median fovea.

Labium long, with the sides converging distad; anterior margin convex, semicircular. Distal end bearing numerous stout spinules or cusps in transverse rows.

Coxae of palps bearing numerous cusps similar to those of labium in a broad band across the distal end, none present proximally. Palpi with many stout, curving spines arranged on sides toward ventral

¹ *princeps*, first in rank, prince.

surface in mostly two series on tibia, patella, and tarsus. Femur bearing stout bristles but with no true spines. Tarsal claws with two very small teeth proximally.

Leg I with paired claws each bearing a single long tooth at base; tarsus and metatarsus with the usual band of stout spines on each side; tibia with a similar band of short and some longer spines on the caudal side, while on the anterior side there are only two short spines at the distal end; patella unarmed. Leg II with claws and tarsus and metatarsus similarly armed to those of leg I, with addition of some longer ventral spines; tibia with a dense area of short, acute appressed spinules or teeth on the posterior side, these being much more numerous and densely arranged than on tibia I; patella unarmed. Leg III with claws, tarsus, and metatarsus as in I and II, the metatarsus with spines dense on caudal side but absent on the anterior excepting for a single long terminal one; tibia with many stout short spines on dorsal surface on the distal half; patella with fewer spines or teeth at distal end, these chiefly in two transverse rows. Leg IV having tarsus with few longer spines chiefly on the anterior side; metatarsus with four pairs of ventral spines; tibia unarmed; patella with numerous stout, short spines or teeth in a broad band dorsally along the anterior side; the tooth at base of claw in leg IV and III much reduced.

Female (type). Length 16 mm.

Cephalothorax: length, 7.3 mm.; width, 7.3 mm.

	fem.	tib+pat.	met.	tar.	total
Leg I	4.2 mm.	5 mm.	2.8 mm.	1.6 mm.	13.6 mm.
Leg II	4.2	5	2.8	1.6	13.6
Leg III	4	4.5	3.1	1.5	13.1
Leg IV	5.1	7	3.5	1.6	17.2

This species seems to be close to *A. crassipes* Keys, but it differs importantly from that species according to the description, *e. g.* in the proportions of the cephalothorax and conspicuously in the relative sizes and distances of the eyes. It is like the preceding species and *A. caraiba* in having the anterior row of eyes longer than the posterior.

CTENIZINAE.

PACHYLOMERUS TUOBITUS¹ sp. nov.

Plate 1, fig. 6-8.

Type.—M. C. Z. 7. ♂. Illinois. Peabody acad. sci. Salem.

Carapace and chelicerae very dark, black or nearly so. Sternum and coxae of legs beneath dark brown or chocolate colored. Legs dorsally almost black, ventrally lighter, more brownish, especially the metatarsi and tarsi as also the tibia of palpus.

Fovea thoracica less than one third the width of the carapace; a single fine impressed line extending from the fovea to the eye-area. Entire surface of carapace densely finely roughened with impressed lines and dots, finely coriaceous.

Anterior row of eyes procurved; median eyes subequal to the lateral, or a little smaller and rather closer to each other than to these. Posterior row of eyes a little recurved; median eyes smaller than the lateral, much closer to the latter than to the anterior median.

Labium bearing on the anterior border 11 cuspules of which 6 are arranged in a distal transverse row in two groups of three each, these being separated by a wide space at middle; the other 5 are arranged somewhat in the form of a V with the apex toward the median interval in the first row.

Metatarsus and tarsus of leg I with a band of spinules along meso-lateral surface on each side of scopula; a similar band in corresponding position on the tibia with a few also on the ventral surface; a complete row on the tibia in the type consists of 11 or 12 spinules.

Tibia of male palpus thickest dorsoventrally at middle of length from where it narrows distad and proximad, not at all swollen at base; a fringe of long hairs over its ventral surface. Bulb of the palpal organ globose. Stylus long and distally very slender, distad of the middle evenly curving.

Male (type). Total length, 20 mm.

Cephalothorax: length, 8.2 mm.; width the same, or scarcely narrower.

¹ Gosiute *tuobit*, black.

	fem.	tib. + pat.	met.	tar.	total
Leg I	7.1 mm.	8.8 mm.	3.3 mm.	2.1 mm.	21.3 mm.
Leg II	6	8	3.2	2.2	19.4
Leg III	6	7	3.2	3	19.2
Leg IV	7.5	8.7	5.1	3.1	24.4

Apparently nearest to *P. modestus* Banks, described from New Mexico; but it is a much larger species differing as well in the characters of the eyes (*c. g.* the posterior row recurved instead of procurved), in proportions and structure of the male palpus, in the more numerous spines on tibia of leg I, etc. The two species are alike in their dark color and in the characteristic roughening of carapace and of dorsum of abdomen.

LECHRICTENUS,¹ gen. nov.

Eye-area wider than long, more than 1.5 times so. Anterior row of eyes strongly procurved; median and lateral eyes subequal. Posterior median eyes somewhat larger than the laterals.

Rastellum extending as a narrow band wholly across chelicera; not at all extending proximad along mesal edge; chelicera not in the least prominent at distal end within.

Labium attenuated distad; armed distally with spinules arranged in several series.

Spinules on coxae of maxillipedes confined to an area on proximal half.

Sternal foveolae not far apart; (in type there is in addition a deep transverse furrow tangent to anterior edges of foveolae).

Tibiae, metatarsi, and tarsi of four anterior legs and tarsi and tibiae of palpi with a longitudinal band of spinules on each side. Metatarsus and tibia of leg III spinulose above at distal end only. Tarsi of legs III and IV pluriaculeate near claws.

Type Species.—*Lechrictenus lamprus*, sp. nov.

This genus differs from *Pachylomerus*, which it in general resembles, in having (1) the anterior median eyes subequal to the laterals as in *Conothele*; (2) the metatarsus III aculeate only at distal end, also much as in the latter genus; (3) the spinules on coxae of pedipalps confined to proximal half; and (4) conspicuously in the form of the rastellum. The eye-area is narrower proportionately than in the Asiatic genus *Conothele*, the anterior row is more strongly procurved, the posterior median eyes are relatively larger, etc.

¹ λελκτικός, slanting, oblique, κρείς, a comb.

LECHRICTENUS LAMPRUS,¹ sp. nov.

Plate 1, fig. 9, 10; Plate 2, fig. 1.

Type.—M. C. Z. S. ♀. Florida?

Carapace and sternum shining chestnut; legs similar; the distal articles darkest, in part mahogany or black, the femora paler ventrally. Chelicerae black, the hairs of the oral fringe and that in a transverse band above the rastellum rufous. Abdomen fuscous.

Pars cephalica strongly elevated, highest midway between eyes and fovea thoracica immediately in front of the posterior declivity; anterior border elevated, there being a pronounced transverse furrow on a level immediately caudad of eye-area. Fovea thoracica strongly lunate; less than one third the width of the carapace.

Eye-area between 1.5 and 1.7 times wider than long. Anterior row of eyes strongly procurved; eyes equal or very nearly so. Posterior row straight or slightly recurved shorter than the anterior row; the median eyes larger than the lateral ones.

Sternum distinctly longer than wide. Relatively broader caudally and more strongly narrowed cephalad than, *e. g.*, in *Pachylomerus audouini*. A conspicuous transverse furrow tangent to anterior edges of foveolae, the furrow extending nearly half way from median line to margin on each side. Foveolae not far apart.

Labium broad at base but strongly narrowed and rounded distad. Spinules at distal end in three transverse series, these in the type 8 in number (3, 3, 2).

Spinules on the coxae of the pedipalps in a subtriangular patch with apex distad toward middle of article, none occurring on distal portion.

Rastellum composed of numerous stout teeth arranged in a transverse band across entire width of chelicera above base of claw, but not at all extending proximad along the inner edge as it does, *e. g.* in species of *Pachylomerus* and with no trace of a rounded lobe or process at distal end on inner side of claw.

Spinules of lateral bands of tibiae, metatarsi, and tarsi of legs I and II dense and short. Metatarsus of leg III dorsally with a band of short spinules across distal end, the dorsal surface elsewhere free of spines but a few on anterior and posterior surface in a single series extending proximad to middle. Tibia III with numerous similar

¹ λάμπος, distinct, manifest.

short spinules at distal end above. Many spines near claws on tarsi III and IV.

Female (type). Total length about 26 mm.

Cephalothorax: length, 13.7 mm.; width, 12 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	7.2 mm.	9.25 mm.	3.2 mm.	2.1 mm.	21.75 mm.
Leg II	6.9	8.2	3	2.1	20.2
Leg III	6.8	7.8	3.1	3.1	20.8
Leg IV	8.5	9.25	5.2	3.1	25.55

APTOSTICHUS SIMUS,¹ sp. nov.

Plate 2, fig. 2, 3.

Type.—M. C. Z. 9. ♀. California: San Diego. G. R. Crotch. Pars cephalica conspicuously elevated. Fovea thoracica nearly transverse, being but slightly procurved.

Ocular tubercle much lower than in *A. atomarius* Simon. Anterior row of eyes strongly procurved; median about half the diameter of the lateral. Posterior median eyes a little smaller than the anterior median and much smaller than the posterior laterals.

Posterior sternal impressions proper small, oval, widely separated from each other and also from the margin but each with a shallow depression or furrow continuing from its ectal end to the margin.

No spinules present on labium in the type.

Spinules of coxae of pedipalps in a dense area sharply limited and confined to mesocaudal corner.

Tarsus of palpus scopulate beneath, the scopula divided by a distinct band of short setae; tibia with 3 very long spines in a series on mesal side below, the most proximal of these spines being almost bristle-like.

Tarsi and metatarsi of legs I and II scopulate to base, the scopula divided by a distinct setose band. Metatarsus and tibia of leg I wholly lacking spines in the type. Tibia of leg II with a series of 3 very long spines on ventral surface toward ectal side, but with no apical spines; metatarsus with two pairs of ventral spines proximal of middle, with three apical spines and immediately proximal

¹ Gosiute *sima*, one, single.

of these 3 additional very small spines or spine-like bristles. Patella of leg III with about 15 curved, appressed spines on the anterior side arranged in 3 longitudinal series; tibia as usual with a band of spines on each side but with none strictly dorsal in position. Tibia of leg IV unarmed excepting for two slender apical spines beneath; tarsus with two pairs of spines on anterior side toward distal end and on inner side with two spines also toward distal end. Claws of posterior legs with 5 teeth in a single sinuous series, the next to the most proximal of these being much the longest. The teeth on claws of anterior legs are similar, or only 4 may be present on claws of leg I; the teeth are similarly in a single series but this is more strongly sinuous and may appear double.

Female (type). Length 12 mm.

Cephalothorax: length, 6 mm.; width, 5 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	4.3 mm.	5.1 mm.	2.2 mm.	1.1 mm.	12.7 mm.
Leg II	3.8	4	1.8	1.3	10.9
Leg III	3.4	3.2	2	1.5	10.1
Leg IV	4	5.1	3.1	1.8	14.

Readily distinguished from the other species known by differences in spining of the legs (*e. g.*, in wholly lacking spines on tibia and metatarsus of leg I).

AVICULARIINAE.

CYRTOPHOLIS MEDIUS, sp. nov.

Plate 2, fig. 4-6.

Type.—M. C. Z. 17. ♂. W. I.: St. Kitts, F. Lagois.

Paratype.—M. C. Z. 17. ♂. W. I.: St. Kitts, F. Lagois. March, 1879.

Paratype.—M. C. Z. 18. ♀. W. I.: St. Kitts, F. Lagois.

Integument of cephalothorax, legs, and chelicerae chestnut. Pubescence of these parts brown of a golden lustre and cinereous intermixed, the latter being especially conspicuous on ventral surface of femora. Bristles either wholly brown or with distal portion grey; bristles of

legs more than usually numerous. Legs showing the usual somewhat lighter longitudinal streaks above but otherwise unmarked. Abdomen with the large black spot above as in *C. bartholomei*, etc.

Anterior row of eyes procurved; a line tangent to anterior margins of median eyes in dorsal view passing a little in front of middle of lateral eyes. Anterior median eyes with diameter equal to long diameter of the lateral eyes; only their radius apart and distinctly closer to the lateral eyes. Posterior lateral eyes with longitudinal diameter three fourths that of the anterior laterals; clearly larger than the posterior medians.

Cuspules of labium and of coxae of palpi as usual.

Tibia of palpus of male slender; without spines. Bulb of palpal organ mostly red in color; pyriform, the bulb gradually narrowing into the spine which becomes distally slender and acute; spine somewhat flattened, slightly twisted, its anterior surface concave and its caudal convex, not carinate.

Stridulating organ consisting of 20-24 clavate and plumose bristles on trochanter I and of about 24 similar ones on the trochanter of the palpus.

Metatarsus III scopulate over distal two thirds of length; metatarsus IV scopulate only at distal end. Scopula of tarsus IV alone divided by setose band, that of tarsus III being entire.

First leg of male with the tibia clearly longer than the metatarsus; inferior spur slender, curved mesad and dorsad, apically somewhat rounded but produced into an acute spinous point toward dorsal edge. Superior process or spur rather more than half as long as the inferior one, expanding weakly at distal end and bearing on the edge toward the inferior process a stout closely appressed spine. Metatarsus gently bowed dorsad as in various related species.

Femur of leg III considerably swollen but less so than in *C. femoralis*, the ratio of width to length above being 3.1: 9 as against 3: 7.8.

Male (type). Cephalothorax: length, 11.3 mm.; width, 9.2 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	10.7 mm.	14.1 mm.	8 mm.	4.6 mm.	37.4 mm.
Leg II	9.8	12.5	8.1	4.5	34.9
Leg III	9	11	9	5	34
Leg IV	10.8	14.1	12.1	5.2	42.2

Resembling the form identified by Pocock as *C. bartholomei* Latr. in general structure but a clearly smaller species, differing also in the

closer approximation of the eyes of the anterior row, somewhat in the form of the palpal organ, the form of the processes of tibia I in the male, the greater relative length of tibia I to metatarsus I, etc. It seems also to be especially close to *C. femoralis* Pocock, described from Montserrat; but it differs in having metatarsus I in the male bowed dorsad instead of straight, in the less crassate femur of leg III, and in having the scopula of tarsus III entire; the posterior lateral eyes are relatively larger.

CYRTOPHOLIS PORTORICAE, sp. nov.

Plate 2, fig. 7.

Type.—M. C. Z. 16. ♀. Porto Rico.

Integument of cephalothorax and appendages chestnut. Pubescence of carapace brown, with some of cinereous color intermixed especially along the edges. The grey and brown hair intermixed on legs as usual with the grey most abundant on ventral surface of femora and coxae as well as much on sternum. The usual lighter stripes above on legs showing especially on patellae and tibiae. Abdomen with the large black spot on caudal half above as in related species. Bristles of legs fewer and shorter than in the preceding species; brown, in part paler distally; those of abdomen fewer and less conspicuous than in *C. medius*.

Anterior row of eyes procurved in such degree that a line tangent to anterior margins of the median eyes in dorsal view passes through anterior third of lateral eyes. Anterior median eyes equal in diameter to the longitudinal diameter of the laterals or slightly larger; their radius or a little more apart. Posterior lateral eyes with longitudinal diameter about two thirds that of the anterior laterals, more than their radius from the latter. Anterior eyes with visual axis directed less laterad than in *C. medius*.

Cephalothorax relatively narrower than in *C. medius*.

Palpus when extended along side of leg I reaching to the end of proximal third of metatarsus of the latter.

Stridulating bristles of trochanter of palpus slender, acute, only slightly clavate, near 30 in number; those on trochanter I 30 or more, closely arranged, shaped like those of palpus.

Female (type). Total length near 23 mm.

Cephalothorax: length, 10.2 mm.; width, 8 mm.

	fem.	tib. +pat.	met.	tar.	total
Leg I	7.9 mm.	10.4 mm.	5 mm.	3 mm.	26.3 mm.
Leg II	6.3	9	5	3	23.3
Leg III	6	7.7	5.1	3.1	21.9
Leg IV	8.1	10.4	8	4	28.5

Differs from *C. medius*, above described, in having the plumose bristles of the stridulating organ decidedly more slender and less clavate and also more numerous. Bristles of legs and abdomen less coarse, fewer in number and shorter. Anterior row of eyes less procurved.

CYRTOPHOLIS ANNECTANS, sp. nov.

Plate 3, fig. 1, 2.

Type.—M. C. Z. 23. ♂. W. I.: Barbados, 1870. J. Graham Briggs.

Paratype.—M. C. Z. 24. ♀. W. I.: Barbados, 1870. J. Graham Briggs.

Integument of carapace, sternum, legs, and chelicerae when dry black or nearly so, showing in parts a faint reddish tinge which is more evident when specimens are immersed. Pubescence of cephalothorax and appendages golden brown. On the legs the usual longitudinal streaks of grey show above, especially on patellae and tibiae, and across distal ends of joints is the narrow line of similar grey hair. Bristles of legs of a more reddish cast proximally, distally becoming greyish.

Anterior row of eyes in dorsal view weakly procurved, a line tangent to anterior edges of median eyes passing in front of middle of lateral eyes. Anterior median eyes about equal to or scarcely larger than the laterals as measured by long diameter; about their radius apart and a little farther from the laterals. Posterior lateral eyes nearly equalling the anterior laterals from which separated by a little less than three fourths their diameter. Posterior median eyes very much closer to the lateral eyes than to the anterior median eyes; clearly smaller than the laterals; moderately elliptic. A line tangent to the caudal edges of the two posterior eyes of each side touching or passing very close to the anterior median eye of the opposite side. Eye-area wider than long in ratio 48:25.

Stridulating bristles on trochanter I numerous, 30 or more in num-

ber scarcely or not at all clavate from above base to middle, distally acuminate; plumose, much larger than in *C. medius*. No plumose hairs on femur I.

In the male palpus the tibia is not enlarged; narrowing distad as usual. Process of bulb compressed laterally though narrow, attenuated toward tip and acutely pointed; in anterior view curving ectad distally, the curve even, the process not geniculate.

Scopula of tarsus IV in the male with a row of a few setae along median line, but these only vaguely dividing the scopula, while in the female no setose line at all is detectable, the condition there being that of the Eurypelmatae; in this respect the species agrees with *C. bonhoti* Cambridge described from the Bahamas and by its author made the type of *Lyrosceles*.

Tibia I in the male with the inferior spur slender, narrowed, and conspicuously curving mesad at distal end. Superior process short, bent toward the inferior process, expanded at end into a small sub-circular plate-like form. Metatarsus a little bent dorsad near level touched by the inferior process of tibia when the joint is flexed.

Male (type). Length 37 mm.

Cephalothorax: length, 17 mm.; width, 14 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	14 mm.	18.2 mm.	10.7 mm.	6.1 mm.	49 mm.
Leg II	13	16.2	11.1	6.1	46.4
Leg III	12	15.3	12	6	43.3
Leg IV	14.5	18	16	7	55.5

Female. Cephalothorax: length, 19.7; width, 17 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	14 mm.	17.6 mm.	8.1 mm.	5.8 mm.	45.5 mm.
Leg II	12	15.1	9	5.8	41.9
Leg III	11.3	14	10	5.8	41.1
Leg IV	14	17.1	14	6	51.1

This is a larger species than *C. medius* and differs as well from that form in proportions; *e. g.* tib.+ pat. I is a little longer than tib.+ pat. IV in both sexes, and metatarsus IV in the male is shorter than the cephalothorax whereas in *C. medius* it is decidedly longer while a very characteristic feature is the essentially entire condition of the scopula of tarsus IV; the process of the palpal organ is very nearly the same but it is proportionately more slender; tibia I is equal to

metatarsus I whereas in *C. medius* it is longer. It is undoubtedly close to the form identified by Pocock as *C. venatorius* Linné (= *bartholomei* Latr.); but I am unable to satisfy myself from the descriptions as to the identity of the species had by Linné or Latreille since there now appear to be a number of closely related species on the Antilles agreeing equally well with the original accounts.

CYRTOPHOLIS PELUS,¹ sp. nov.

Plate 2, fig. 8-10.

Type.—M. C. Z. 20. ♂. W. I.: St. Thomas. Hassler Exped.

Paratype.—M. C. Z. 21. ♂. W. I.: St. Thomas. Hassler Exped.

Paratypes.—M. C. Z. 22. Two ♀♀. W. I.: St. Thomas. Hassler Exped.

The integument of the cephalothorax and appendages is blackish as in the preceding species. The pubescence on the carapace is a much darker brown than in that species but has similarly a distinctly golden lustre. The pubescence of the legs above in general is very dark so that the longitudinal grey stripes appear very sharply defined and conspicuous in consequence; legs paler beneath and with the usual grey fringe across ends of joints above; bristles short, numerous, dark reddish brown. Abdomen with the velvety black spot above as in the related species.

Eye-tubercle sharply limited and strongly elevated, convex. Eye-area wider than long in ratio 21:10. A line tangent to the anterior margins of the anterior median eyes passes through the anterior third of the lateral eyes. Anterior median eyes with diameter a little larger than the long diameter of the laterals (ratio 14:13); their radius or less apart and nearly as close to the laterals. Posterior lateral eyes much smaller than the anterior laterals (ratio of long diameters about 2:5), from which they are separated by their own diameter. Posterior median eyes fully as large as the laterals. A line tangent to the caudal edges of the two posterior eyes on each side touching or intersecting the anterior median eye of the opposite side.

Stridulating spines of trochanter I numerous and densely arranged; clearly more numerous than in *C. annectans* and also much more

¹ πελός, dark colored.

slender and acute than in that species; gradually acuminate, not at all clavate (Plate 2, fig. 9).

Scopula of tarsus IV with setose line detectable proximally only, the setae few, much as in the preceding species and *C. bonhottei* Cambr.

Metatarsus I in the male only slightly bowed dorsad, the curve mostly a little distad of point touched by inferior tibial spur when joint is flexed. Inferior tibial spur slender, curved dorsomesad and somewhat narrowed distad. Superior spine shorter than in *C. annexans* and straight; not expanded distad but bearing on inferior edge the usual stout and closely appressed spine.

Femur III in the male but little thickened, being 3.33 times longer than wide.

Palpus of the male with tibia not enlarged, narrowed distad. Spine of bulb slender, terete, and needle-like distally; bent first a little forward and then more considerably ectad.

Male (type). Length 32 mm.

Cephalothorax: length, 16.8 mm.; width, 13.6 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	14.8 mm.	19 mm.	12 mm.	6.5 mm.	52.3 mm.
Leg II	13.7	16.7	12	6.2	48.6
Leg III	11.8	15	12	6	44.8
Leg IV	14.2	17.8	16	6.1	54.1

Metatarsus I equal to or a little exceeding tibia one above.

Clearly separated from *C. annexans* in the character of the palpal organ, the spine being very slender and needle-like instead of compressed. The pubescence is conspicuously darker and the posterior eyes are very different in their relative sizes. It seems to be near to *C. bonhottei* Cambr., from the Bahamas, which it resembles in the form of the stylus of the palpal organ, but this is longer and more curved; the stridulating spines of trochanter I are much more numerous and less clavate and are inserted over the entire length of the article; and tib. + pat. I is longer than tib. + pat. IV.

CALOPELMA,¹ gen. nov.

Ocular tubercle moderately high. Anterior median eyes a little larger than the laterals to which they are clearly closer than to each other.

¹ καλός, pretty, πέλμα, sole of the foot.

Labium minutely densely spinulose at distal end.

Fovea thoracica transverse or pit-like.

Metatarsus I scopulate nearly to base; metatarsus II scopulate to or a little proximad of middle; metatarsi III and IV scopulate only at distal end. Scopula of tarsus III with setose line only at base; that of tarsus IV divided by a narrow median line of setae over whole length. Metatarsus I armed at base as well as at apex, with a spine. Metatarsus II ventrally with an apical spine and proximad of middle with three, 2 in a longitudinal series with 1 mesad of the more basal of these; a single spine in addition on mesal side.

In the male metatarsus I is bowed dorsad. Tibia I with two spurs at distal end of which the superior one is much the shorter; the inferior or ectal one curved dorsad, the tibia closing against mesal side of its tip.

Tibia of palpus of male without trace of a rastellum of spines.

Type Species.—*Calopelma brasiliiana*, sp. nov.

In some respects this genus is intermediate between *Hapalopus* and *Hemiercus* as defined by Simon. It differs from both in lacking a rastellum on the tibia of the male palpus, in having the fovea thoracica transverse instead of procurved, and in the different spining of metatarsus I. From *Hapalopus* it also differs in the inequality of the eyes of the anterior row, in having the spurs of tibia I in the male very unequal in length, etc.

CALOPELMA BRASILIANA, sp. nov.

Plate 3, fig. 3, 4.

Type.—M. C. Z. 25. ♂. Brazil: Rio de Janeiro; Rio de Janeiro. Nathaniel Thayer Exped.

Integument of carapace excepting in front of eye-tubercle, and of legs, palpi, and chelicerae very dark chestnut, almost black; that of the sternum, coxae of legs beneath, and coxae of palpi, chestnut. Pubescence of carapace golden brown. Pubescence of legs brown-grey, two longitudinal darker stripes showing especially on tibiae above, with one basally oblique one on metatarsi; bristles light brick-red, of moderate length, more numerous ventrally. Sternum and coxae of legs beneath with pubescence almost wholly grey with longer light brick-red hairs more sparsely scattered. Abdomen above velvety

black; a longitudinal area extending caudad three fourths of the length and somewhat constricted near middle with but few bristles, this area being left thus almost clear black, while bordering it and on sides of abdomen long brick-red bristles are densely arranged and conceal the black of the shorter pubescence; similar but shorter brick-red hairs over ventral surface.

Ocular area wider than long in ratio 36:19; the two eye-rows equal in length. Anterior row of eyes viewed from in front strongly procurved, a line tangent to the lower edges of the medians passing well above the laterals; viewed from above the row is very weakly procurved, a line tangent to anterior edges of the medians passing well in front of the middle of surface of the laterals. Anterior median eyes larger than the laterals in about ratio 13:11; not quite two thirds their diameter apart and scarcely more than one third their diameter from the laterals. Posterior lateral eyes equal in long diameter to the anterior laterals from which they are separated by a distance equal to their radius. Posterior median eyes with diameter smaller than that of the laterals in ratio 9:11; but little elongate; closer to laterals than to anterior medians.

Tibia I in male equal to the metatarsus or scarcely exceeding it. Outer or inferior process of tibia curved dorsad and at tip a little mesad, twice as long as the superior spur which bears a stout spine appressed to its ectal edge.

Patellae III and IV unarmed.

Tibia of male palpus unarmed with spines. Stylus of bulb of palpal organ bent at base at right angles to the long axis of the bulb; at base as broad as contiguous part of bulb; compressed, gradually narrowing distad; toward distal end raised into a longitudinal median keel on its ectal surface, the mesal surface being correspondingly grooved; in anterior view the spine distad of the middle bends abruptly ectad and then more ventrad at the very tip which is acute.

Male (type). Length.—25 mm.

Cephalothorax: length, 11 mm.; width, 10.1 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	12.1 mm.	15.1 mm.	9.6 mm.	5 mm.	41.8 mm.
Leg II	11.2	13.9	8.2	4.4	37.7
Leg III	9.7	12.1	8.8	4.8	35.4
Leg IV	11.8	14.7	12	5.1	43.6

GRAMMOSTOLA CHALCOTHRIX,¹ sp. nov.

Plate 3, fig. 5-7.

Type.—M. C. Z. 41. ♂. Argentina: Rosario. W. M. Davis.*Paratype*.—M. C. Z. 42. ♂. Argentina: Rosario. W. M. Davis.

Integument of cephalothorax, legs, and palpi excepting the coxae ventrally very dark chestnut; that of chelicerae black. Pubescence of cephalothorax and legs dark brown of bronze or golden lustre; the bristle-free streaks on joints above very inconspicuous, not contrasting in color of pubescence but only through absence of the bristles. Bristles of legs dark brown proximally, lighter distad. Joints of legs with the usual fringe of light hairs across distal ends above; femora greyish ventrally; pubescence of coxae also with much grey ventrally. Abdomen with long bristles dorsally and laterally and shorter ones ventrally of golden yellow color excepting for their darker bases.

Eye-tubercle convex, at middle strongly elevated, vertical in front and steeply slanting behind. Ocular area wider than long in ratio 45:25; anterior and posterior eye-rows equal or nearly so. Anterior row of eyes as seen from above considerably procurved, a line tangent to anterior edges of the medians passing somewhat caudad of middle of surface of laterals. In anterior view a line tangent to lower edges of medians passes well above lateral eyes. Anterior median eyes with diameter equal to the long diameter of the laterals; their radius or but little more apart and very nearly the same distance from the laterals. Posterior lateral eyes smaller than the anterior laterals their diameters being in ratio of about 5:6; four fifths their diameter from the anterior laterals. Posterior median eyes with long axis equal to that of the laterals to which they are much nearer than to the anterior medians.

Stridulating spines on coxa I brown, small, slender, distinctly clavate (Plate 3, fig. 6); very numerous, being closely crowded in a large scopula-like area at the distal end above the suture and in a similar area below it. The spines on coxa of palp in a similar large scopuliform patch at distal end.

Metatarsus of leg I in the male curved; scopulate to base or very nearly so; shorter than the tibia. Processes of tibia I divergent; superior one much the shorter, straight, narrowed toward apex, a stout spine springing from base of its ectal edge as usual but this

¹ χαλκός, bronze, θρίξ, hair.

somewhat divergent; inferior process bent dorsad and somewhat mesad at tip. Metatarsus II scopulate nearly to base; metatarsus III scopulate nearly to middle; and metatarsus IV scopulate over distal third.

Spine of the male palpal organ long, very slender and needle-like distally; in lateral view geniculate at beginning of the more slender portion; in anterior view curving conspicuously but nearly evenly ectad.

Male (type). Length cir. 38 mm.

Cephalothorax: length, 19 mm.; width, 16.1 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	16.7 mm.	21.1 mm.	13 mm.	7 mm.	57.8 mm.
Leg II	16	20.1	13	7	56.1
Leg III	14	17.1	13.9	7.5	52.5
Leg IV	16.1	20.3	17	8.2	61.6

This species has similarities to *G. mallicomum* Auss., especially in the stridulating organ. *G. mallicomum* has also been recorded from Argentina. In the present species the male palpal organ is conspicuously different, the stylus being much longer, more slender, and more curved. The eyes of the anterior row are larger and closer together and in the male the elevation of the median ones above the laterals in anterior view is distinctly greater. The eye-tubercle in the female is relatively much lower. Tibia I in the male is longer than the metatarsus. The cephalothorax in the male much exceeds metatarsus IV.

GRAMMOSTOLA CALA,¹ sp. nov.

Plate 3, fig. 8, 9.

Type. M. C. Z. 39. ♂. Chile: Talcahuano. Hassler Exped.

Paratype.—M. C. Z. 40. ♂. Chile: Talcahuano. Hassler Exped.

Integument of carapace, sternum, legs, and chelicerae, excepting sides of coxae and ventral part of chelicerae, black or very nearly so. Pubescence of carapace grey and brown; the longer hairs about margins brown of pink tinge. Legs above with pubescence grey and

¹ κάλος, beautiful.

brown, with longer and stouter dark hairs; femora, patellae, and tibiae showing two conspicuous narrow longitudinal stripes of white or light grey hair unmixed with the brown and a similar median dorsal line on proximal portion of metatarsi; a narrow band of grey hair across distal ends of joints above; femora ventrally with black pubescence intermixed with that of lighter color and on anteroventral surface of femur I predominating; bristles long, numerous, light rust-brown with in part a pinkish tinge, especially distally. Pubescence of sternum and of coxae beneath dense velvety black. Fringe of chelicerae and endites rosy. Pubescence of venter of abdomen velvety black; bristles of dorsum like those of legs.

Eye-tubercle moderately elevated, convexly bulging between anterior median eyes. Eye-area wider than long in ratio 41:23. Posterior row a little longer than the anterior (41:39). Anterior row of eyes not strongly procurved, a line tangent to anterior margins of median eyes in dorsal view passing through anterior third of lateral eyes. Anterior median eyes about equal or slightly less in diameter than the lateral eyes; a little less than their diameter apart (20:23), only a little more than their radius from the laterals. Posterior lateral eyes with long diameter larger than that of the anterior laterals (28:25), from which they are removed by about their radius. Posterior median eyes elliptic, very clearly smaller than the lateral eyes, the ratio of long diameters being 9 or 10:14.

Stridulating organ embracing bristles in an area on distal third of coxa of palp, the area broader distad than proximad; bristles clavate, about 30 in number. Stridulating bristles on coxa I forming a patch above suture and a rather smaller one below it; the bristles above suture larger than those below.

Scopula of metatarsus I dense, extending proximad to middle only; that of metatarsus II like that of I; metatarsus III with scopula a little sparser; metatarsus IV with scopula covering only about distal third.

Metatarsus of leg I in the male only weakly bowed. Processes of tibia parallel or but slightly divergent, the superior one decidedly more slender and two thirds as long as the inferior one, with the usual stout spine appressed to the ectal edge; inferior process abruptly bent dorsad toward its distal end, but its tip not reaching projected axis of the other process; inferior process proximad of the abrupt bend straight or nearly so.

Stylus of palpal organ of male long, distally very slender and needle-like; in lateral view only weakly and evenly curved, not at

all geniculate; in anterior view moderately bent ectad, the curve chiefly at middle of length.

Male (type). Length 38 mm.

Cephalothorax: length, 19.1 mm.; width, 16.5 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	16.8 mm.	23 mm.	11.3 mm.	7 mm.	58.1 mm.
Leg II	15.1	20	11.3	7	53.4
Leg III	14	16	12	7	49
Leg IV	16	20	15.1	8	59.1

Grammostola spatulatum Cambr., also from Chile and apparently closely related, differs in having the stridulating spines of coxae of palp and leg I few in number and of larger size, red in color; in having the metatarsus I as long as tibia (in *G. cala* shorter in ratio 11:13); in the different form of spine of palpal organ, etc.

EURYPELMA REGINA,¹ sp. nov.

Plate 4, fig. 1.

Type.—M. C. Z. 56. ♂. Brazil: Rio de Janeiro; Rio de Janeiro. Nathaniel Thayer Exped.

Paratypes.—M. C. Z. 57. Two ♀ ♀. Brazil: Rio de Janeiro; Macacos. William Roberts.

Integument of carapace, sternum, palpi excepting coxae ventrally, chelicerae excepting ventrally, and legs black or in part of dull chestnut-black. Coxae of palps beneath proximal portion of labium, and chelicerae ventrally, lighter and more reddish. Pubescence of these parts in general dark chocolate-brown, with grey intermixed on ventral surface of femora, on lower part of anterior surface of chelicerae, etc. Fringe of the chelicerae and endites bright red as usual. The longitudinal streaks on patellae and other joints, in many species occupied by lighter pubescence, are in the present one glabrous, bristle free, a fringe of hair extending in on each side partly covering integument. Pubescence of sternum and coxae ventrally velvety chocolate-brown, some grey intermixed on the coxae. Bristles of legs long, numerous, rufous proximally and cinereous distally; those

¹ *regina*, queen.

of the dorsum of the abdomen similar to those of legs but those of the lower lateral and ventral surfaces rufous throughout.

Distal ends of endites with cuspules numerous and dense.

Eye-tubercle elevated abruptly; moderately high, convex. Ocular area, in female, twice as wide as long or a little more caudally, the posterior row of eyes being wider than the anterior in the ratio 13:12. Anterior row of eyes viewed from in front procurved in such degree that a line tangent to the lower edges of the median eyes passes a little above the upper edges of the lateral ones; viewed from above a line tangent to anterior edges of median eyes passes a little in front of middle of surface of each lateral eye. Anterior median eyes with diameter about seven eighths the long diameter of the laterals; three fourths their diameter apart and almost the same distance from the laterals. Posterior lateral eyes with longitudinal diameter exceeding that of the anterior laterals in about ratio 19:17. Posterior median eyes elongate, the long axis equalling that of the lateral ones or very nearly so; outer edge a little incurved just cephalad of middle; only slightly nearer the lateral eyes than to the anterior medians. A line tangent to caudal edges of two posterior eyes on each side intersecting anterior median eye of the opposite side.

Trochanters of palpi and of leg I with no plumose hairs. Metatarsus I scopulate about three fourths of length toward base, metatarsus II two thirds the length, III from one third to one half, and IV only at the distal end. In the male, metatarsus I has two spines on anterior edge near scopula, one distal and one proximad of middle; two or three ventral spines near middle and one more proximad. Metatarsus II along ventrocaudal surface with an apical, a submedian, and a subbasal pair of long spines; one single spine between middle and distal end at edge of scopula; in anteroventral line a basal spine and one at distal end; a fourth spine at distal end on anterior side and three in line with it more proximad. Femur I with a spine on anterodistal corner above; femur II with 1 to 3 spines in corresponding position; femora III and IV with three or four spines along dorso-caudal edge as well as with two or three along the anterodorsal edge distad of middle of length. All patellae with a spine on anterior side.

Palpus of male with tibia slender, distally narrowed. Bulb of palpal organ black. Stylus compressed throughout length and of uniform width to near tip where acutely pointed; in lateral view abruptly geniculate near middle of length, the two parts being nearly at right angles to each other; in anterior view also strongly bent ectad, but the angle considerably greater than a right angle.

First leg in male with metatarsus moderately bowed in the frequent way, the curvature being chiefly a little proximad of middle; nearly equal in length to the tibia. Processes of tibia divergent; the superior one straight, more than half the length of the inferior one; inferior process curving throughout, with the concavity dorsad as usual.

Male (type). Length 39 mm.

Cephalothorax: length, 20.2 mm.; width, 18.7 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	18 mm.	24 mm.	13.8 mm.	8.2 mm.	64 mm.
Leg II	17	22	15	8.2	62.2
Leg III	16	20	18	8	62
Leg IV	17.6	23.1	23	9	72.2

Female. Length, 50 mm.

Cephalothorax: length, 25.1 mm.; width, 23 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	18.2 mm.	24.8 mm.	11.3 mm.	6.8 mm.	61.1 mm.
Leg II	17	22.2	12.1	7	58.3
Leg III	15.8	20	16.2	7	59
Leg IV	18.8	23	22	8	61.8

Resembling in various ways *E. minax* Thorell, but differing in having metatarsus IV essentially equal to tibia + patella IV in the male; the more abundant spining of metatarsi I and II; and apparently especially in the palpal organ. From *E. doeringi* Holmberg it differs in having the cephalothorax in the male much shorter than the tibia + patella IV instead of longer. It differs from *E. tigrinum* (Pocock), *E. saltator* (Pocock), and *E. vitiosum* Keyserling (genus *Pterinopelma* of Pocock) in lacking plumose hairs on trochanters of palpus and leg I.

EURYPELMA ABERRANS, sp. nov.

Plate 4, fig. 2.

Type.—M. C. Z. 52. ♀. Chile: Casa Blanca.

Integument of carapace, sternum, palpi, and legs chestnut; chelicerae black or nearly so at base above, but chestnut distally and ventrally. Coxae of palps brighter colored beneath as usual. Body in type almost denuded of hair so that this cannot be properly de-

scribed; such hair as there is on carapace and legs is rust-brown in color.

Pars cephalica very low; only slightly rising above the level of the pars thoracica.

Ocular tubercle very low. Ocular area very nearly twice as wide as long (48:25); the two eye-rows equal in length. Anterior row of eyes viewed from in front only moderately procurved, a line tangent to the lower edges of median eyes intersecting the upper part of the laterals; viewed from above a line tangent to the anterior edges of the median eyes passes near middle of surface of each lateral one. Anterior median eyes much smaller than the laterals, the diameters being to each other as 23:38; more than three fourths their diameter apart and only about half as far from the laterals. Posterior lateral eyes with longitudinal diameter three fourths or a little more that of the anterior laterals, from which they are separated by less than their radius. Posterior median eyes with long diameter about four fifths that of the lateral eyes; scarcely elongate, truncate behind; a little closer to lateral eyes than to anterior medians.

Metatarsi I and II scopulate to base; metatarsus III scopulate to middle; metatarsus IV scopulate only at distal end.

Female (type). Length, 48 mm.

Cephalothorax: length, 20.4 mm.; width, 18 mm.; length of pars cephalica 12.2 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	14.2 mm.	20 mm.	9.1 mm.	6.25 mm.	49.55 mm.
Leg II	13	18	9.1	6.8	46.9
Leg III	12.2	16.1	11	7	46.3
Leg IV	15.5	20	15	8	58.5

Tibia I in length 11 mm.

This appears to be the only true *Eurypelma* thus far recorded from Chile.

EURYPELMA LATENS,¹ sp. nov.

Plate 3, fig. 10.

Type.—M. C. Z. 47. ♂. Nicaragua: Polvon. John A. McNeil.

Paratypes.—M. C. Z. 51. ♂, ♀. Nicaragua: Polvon. John A. McNeil.

¹ *lateo*, lurk, hide.

Paratypes.—M. C. Z. 50. Ten immature specimens. Nicaragua: Polvon. John A. McNeil.

Integument of cephalothorax, legs and palpi from light to very dark chestnut; chelicerae darker, in some individuals nearly black above at base, paler beneath as usual. Pubescence of carapace brown of a bronze lustre to more golden brown. Pubescence of legs darker brown; patellae and tibiae dorsally with two longitudinal stripes of bristles free light hair and the metatarsus with a similar single stripe at proximal end; bristles short, from dark reddish brown (male) to light brown (female). The femora with more grey pubescence intermixed ventrally. Pubescence of sternum and coxae of legs beneath brown. Entire dorsum of abdomen black, the sides and venter abruptly paler, brown. Bristles of dorsum of abdomen reddish brown proximad becoming cinereous distad.

Eye-tubercle moderate in height. Ocular area (female) just twice as wide as long; the anterior and posterior rows equal in length. In anterior view a line tangent to lower edges of anterior median eyes passes but slightly above the lateral eyes; in dorsal view a line tangent to anterior edges of median eyes passes near or a little in front of middle of surface of each lateral eye. Anterior median eyes with diameter less than the longitudinal diameter of the laterals in ratio 5:7; four fifths their diameter apart and about their radius from the lateral eyes. Posterior lateral eyes with longitudinal diameter smaller than that of the anterior laterals in ratio 6:7; one third their diameter from the latter. Posterior lateral eyes but little elongate; their longitudinal diameter fully five sixths as great as that of the laterals; nearer the laterals than to the anterior medians.

Labium densely spinulose across distal border as usual.

Metatarsi I and II scopulate to base, III to middle and IV sparsely scopulate at very end only.

First leg of male with metatarsus straight, not bowed dorsad, a little shorter than the tibia. Superior process of tibia stout, acuminate from base. Inferior process less than twice as long as the superior, curving mesad as well as dorsad, the two processes scarcely divergent.

Tibia of male palpus moderately thickened. Bulb of palpal organ on ectal side reddish brown while either the proximal portion of or the entire stylus is black. Stylus in side view bent at right angles to its base, curving a little forward toward middle and ventrad; in anterior view bent moderately ectad at middle; compressed but narrow, gradually attenuated distad.

Male (type). Length, 39 mm.

Cephalothorax: length, 19 mm.; width, 17.1 mm.; length of pars cephalica 13 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	18 mm.	23 mm.	13.3 mm.	8.6 mm.	62.9 mm.
Leg II	17	21.2	13.1	8.6	59.9
Leg III	14.2	18	13.3	7.3	52.8
Leg IV	18	23	19.5	8.5	69

Length of tibia I 13.8 mm.

Female. Length, 48 mm.

Cephalothorax: length, 19 mm.; width, 16.2 mm.; pars cephalica in length 13 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	14.2 mm.	20 mm.	10 mm.	6.2 mm.	50.4 mm.
Leg II	23.3	17.1	9.3	6	45.7
Leg III	12	15.1	11	6	44.1
Leg IV	15.4	20	16	7	58.4

Length of tibia I 12 mm.

This is readily separated from other Central American and Mexican species in which metatarsus I in the male is straight in having metatarsus IV shorter than the carapace instead of being much longer and in having that joint decidedly shorter than tibia + patella IV.

EURYPELMA HESPERA,¹ sp. nov.

Type.—M. C. Z. 48. ♀. Mexico: West Coast. Captain Goff. Ship DOOLEY.

Paratype.—M. C. Z. 59. ♀. Mexico: West Coast. Captain Goff. Ship DOOLEY.

Integument of carapace, sternum, and appendages chestnut. Pubescence of carapace thick, brown of bronze lustre. Pubescence of legs uniform, without lighter stripes. Bristles of legs and abdomen of a more reddish cast.

Eye-tubercle low. Eye-area very nearly twice as wide as long (45:23); anterior and posterior eye-rows equal in length. Anterior

¹ ἑσπερος, western.

row of eyes viewed from in front moderately procurved, a line tangent to the lower edges of median eyes intersecting upper border of lateral eyes; viewed from above a line tangent to the anterior edges of median eyes passes near middle of surface of laterals. Anterior median eyes with diameter smaller than that of the laterals in ratio 3:4; not quite two thirds their diameter apart, less than their radius from the lateral eyes. Posterior lateral eyes smaller than the anterior laterals, their diameters comparing as 13:16; about their radius from the anterior ones. Posterior median eyes very much smaller than the laterals, the diameters being as 8:13; somewhat nearer lateral eyes than to the anterior medians; but little elongate, somewhat obliquely truncate caudad. A line tangent to caudal edges of the two posterior eyes one each side intersecting the anterior median eye of the opposite side

Metatarsi I and II scopulate to base; III for two thirds of length; and IV for about one third of length.

Female (type). Length, 35 mm.

Cephalothorax: length, 15.5 mm.; width, 13.2 mm.; length of pars cephalica 9.2 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	12 mm.	15.1 mm.	8.5 mm.	5.7 mm.	41.3 mm.
Leg II	10.8	14	8.1	5.6	38.5
Leg III	9.2	13.25	9	6	37.45
Leg IV	12.7	16.1	13	6.6	48.4

Tibia I 9 mm. long.

EURYPELMA AUREOCEPS,¹ sp. nov.

Plate 4, fig. 3.

Type.—M. C. Z. 43. ♀. Florida: Tortugas. J. B. Holder.

Integument of cephalothorax, legs and palpi dark chestnut excepting the brighter more reddish ventral surface of coxae of palps; that of the chelicerae black. Pubescence of carapace thick, tufted, and somewhat woolly, of a golden brown color as is that of the chelicerae. Pubescence of the legs brown of a less distinctly golden lustre excepting that of the indistinct longitudinal streaks on dorsal surface of the joints; more greyish on ventral surface of femora. Pubescence of

¹ *aureus*, golden, *-ceps*, head.

sternum velvety brown, that of ventral surface of legs similar but with some grey intermixed. Fringe of endites bright copper-red. Pubescence of abdomen thick, dorsally and laterally brown, in part more or less of golden lustre. Bristles of legs and abdomen long, in the type mostly curved or wavy distally, of a yellow cast, more brown proximally.

Eye-tubercle not high. Ocular area just twice as wide as long; anterior row of eyes a little longer than the posterior. Anterior row of eyes viewed from in front moderately procurved, a line tangent to the lower edges of the median eyes touching or intersecting the upper part of laterals. Anterior median eyes with diameter less than that of the laterals in ratio 2:3; two thirds their diameter apart and closer, only their radius, from the laterals. Posterior lateral eyes smaller than the anterior, their diameters comparing as 4:5; less than their radius from the anterior ones. Posterior median eyes much smaller than the laterals, the ratio of diameters being about 1.4:2; subcircular except for the flattening of the anterior side; much closer to the lateral eye than to the anterior median eye. A line tangent to caudal edges of the two posterior eyes of each side intersecting the anterior median eye of opposite side.

Metatarsi I and II densely scopulate to base; metatarsus III scopulate three fourths the length toward base; and metatarsus IV more sparsely scopulate at distal end only.

Female (type).—Length, 44 mm.

Cephalothorax: length, 19 mm.; width, 17 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	13.8 mm.	18.6 mm.	8.8 mm.	6 mm.	47.2 mm.
Leg II	12.5	16.5	8.8	5.7	43.5
Leg III	12	15.1	9.8	6	42.9
Leg IV	14.3	18.4	13.8	6.1	52.6

Length of tibia I 10.8 mm.

LASIODORA DIFFERENS,¹ sp. nov.

Plate 4, fig. 4-5.

Type.—M. C. Z. 66. ♀. Brazil: Minas Geraes; Lagoa Sancta. Nathaniel Thayer Exped.

¹ *differo*, diverge, differ.

Integument of cephalothorax and legs chestnut; that of the chelicerae black excepting for a reddish tinge ventrally along the fringe; labium black proximally. Pubescence of these parts brown and grey intermixed, the grey showing especially on the ventral surfaces of the femora. Bristles brown, paler, greyish, distally.

Cephalothorax a little longer than tibia + patella IV but decidedly shorter than tibia patella I.

Eye-tubercle decidedly less elevated and proportionately broader than in *L. klugii*. Anterior row of eyes viewed from above procurved in such degree that a line tangent to the anterior edges of the median eyes passes through or very near to center of surface of each lateral eye. Anterior median eyes a little smaller than the lateral (ratio of diameters 13:14); less than their diameter apart (10:13); nearly same distance from the lateral eyes. Posterior lateral eyes with diameter nearly equalling that of the anterior laterals from which they are separated by nearly two thirds their diameter. Posterior median eyes with long diameter a little smaller than that of the laterals; closer to the laterals than to the anterior medians. A line tangent to the caudal edges of the two posterior eyes on each side passing caudad of the anterior median eye of the opposite side.

Cuspules on labium dense and numerous as usual.

Stridulating spines of coxa I fewer than in *L. klugii* and not found at distal end of joint; very long and stout, mostly curving, appressed, acuminate and not at all spatulate, plumose only distally (Plate 4, fig. 4). Plumose hairs dense on trochanter I and also occurring on mesal surface of femur from base well toward distal end. Plumose hairs likewise occurring on trochanter and femur of palpus.

Female (type).—Length, cir. 60 mm.

Cephalothorax: length 25 mm.; width, 23 mm.

	fem.	tib. +pat.	met.	tar.	total
Leg I	19 mm.	26.8 mm.	13.2 mm.	8.5 mm.	67.5 mm.
Leg II	17.6	23.7	13	8.2	62.5
Leg III	16.1	21	14	8.3	59.4
Leg IV	19.5	24.6	20	9	73.1

Differs from *L. klugii* (C. Koch) in its flatter and broader eye-tubercle; in its shorter cephalothorax as compared with tibia + patella I which exceeds it decidedly whereas it is shorter in *L. klugii*; in its stouter legs; etc.

LASIODORA CURTIOR,¹ sp. nov.

Plate 4, fig. 6, 7.

Type.—M. C. Z. 63. ♀. Brazil: Rio de Janeiro; Vassouras, March, 1871. B. P. Mann.

Paratype.—M. C. Z. 64. ♀. Brazil: Rio de Janeiro; Vassouras, March, 1871. B. P. Mann.

Integument of cephalothorax, legs, palpi, and chelicerae dark chestnut; endites ventrally distinctly lighter as usual, more pinkish. Pubescence mouse colored. Bristles brown, lighter distally. Hairs of fringe of chelicerae and endites rust-red.

Cuspules of labium and endites as usual.

A line tangent to anterior edges of anterior median eyes passes in front of middle of surface of each lateral eye. Anterior median eyes equal in diameter to the laterals; their radius or slightly more apart and an equal distance from the lateral eye on each side. Posterior lateral eyes equal in long diameter to the anterior laterals, from which they are separated by a little less than their radius. Posterior median eyes with diameter smaller than that of the laterals in about ratio 10:13; very close to the lateral eye, distinctly farther from the anterior median eye on each side. Posterior median eye situated well caudad so that a line tangent to its caudal edge and that of the lateral eye of the same side passes caudad of the anterior median eye of the opposite side. Ocular area wider than long in the ratio 55:28; slightly wider behind than in front (55:53).

Stridulating spines mostly varying in length, shorter, and decidedly relatively more slender than in *L. differens* (Plate 4, fig. 6) and also more numerous; also extending farther distad on the joint than in that species. Plumose hairs found on trochanter and most of femur as usual.

Female (type). Length of cephalothorax, 19 mm.; width, 17 mm.

	fem.	tib. +pat.	met.	tar.	total -
Leg I	14.5 mm.	20 mm.	10.1 mm.	7 mm.	51.5 mm.
Leg II	13	17.3	9.2	6.8	46.6
Leg III	12.1	16	10.1	6.3	44.5
Leg IV	15	20	15.6	7	58.3

¹*curtus*, short.

This is a considerably smaller species than *L. differens*. Tibia + patella I equals the sum of the corresponding joints of leg IV and exceeds the length of the cephalothorax whereas in *L. differens* tibia + patella I is much longer than tibia + patella IV and decidedly exceeds in length the cephalothorax which in turn is a little longer than tibia + patella IV. The eyes of the anterior row are clearly closer together. The stridulating spines of the coxa are smaller and more numerous.

PHORMICTOPUS CUBENSIS, sp. nov.

Type.—M. C. Z. 79. ♀. Cuba: near Havana? Felipe Poey.

Paratype.—M. C. Z. 82. ♀. Cuba: 1864. Mrs. Brown.

Integument of cephalothorax and legs very dark dull chestnut to black. Pubescence brown with grey intermixed on legs as usual. Bristles rust-brown. The fringe of light hairs across ends of joints above very narrow. The usual longitudinal bristle-free streaks on joints of legs above.

Cephalothorax with pars cephalica low as usual. In profile the pars cephalica is seen to rise convexly back of eye-tubercle, not descending immediately from the tubercle as in *P. cancerides*. Cephalothorax longer than either tibia + patella I or tibia + patella IV.

Anterior row of eyes rather weakly procurved in dorsal view; a line tangent to anterior edges of median eyes passes through anterior fourth of lateral eyes. Anterior median eyes with diameter but slightly smaller than that of the lateral (at least 9:10); their radius or slightly more from each other and from the lateral eyes. Posterior lateral eyes equal in diameter to the anterior laterals from which they are separated by a distance equal to a radius. Posterior median eyes a little smaller than the lateral to which it is very close, or practically equal in long diameter. A line tangent to caudal edges of two posterior eyes on each side intersecting the anterior median eye of opposite side, the median eye not being situated so far caudad relatively as in *P. cancerides*.

Coxa I on anterior surface above suture with bacilliform plumose stridulating spines numerous and in a number of close and irregular series. Femur I on anterior side with a conspicuous scopula of densely arranged plumose hairs. Palpus with corresponding stridulating bristles on coxa and trochanter and also with plumose hairs on ectal surface of femur at base.

Metatarsi I and II scopulate to base; metatarsus III scopulate

over distal two thirds of length; and metatarsus IV scopulate only at apex.

Female (type).—Length, 68 mm.

Cephalothorax: length, 28 mm.; width, 23 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	16.6 mm.	22.8 mm.	12 mm.	7 mm.	58.4 mm.
Leg II	15.2	20.5	12	7	54.7
Leg III	14	19	13	7.2	53.2
Leg IV	16	22.5	18.7	8	65.2

This species differs from *P. cancerides* (Latr.) and *P. nesiotēs*, sp. nov. and agrees with *P. cautus* (Auss.) in having plumose hairs on the anterior surface of femur I. It is in some degree possible that the present species may be *P. cautus* Ausserer; but unfortunately the latter species was based upon males only, while of the present one only the female is known so that comparison cannot be wholly satisfactory, especially since the locality from which the type of *P. cautus* came is wholly unknown.

PHORMICTOPUS NESIOTES,¹ sp. nov.

Plate 4, fig. 8, 9.

Type.—M. C. Z. 80. ♂. Cuba: 1864. Mrs. Brown.

Paratypes.—M. C. Z. 81. Two ♀ ♀. Cuba: 1864. Mrs. Brown.

Integument of cephalothorax and legs dull dark chestnut. Pubescence mostly a somewhat golden brown with some grey intermixed this being more abundant ventrally on the femora especially. Legs with the usual longitudinal lighter streaks on joints above, these showing well on patellae and tibiae especially.

Anterior row of eyes in dorsal view procurved; a line tangent to anterior edges of median eyes passing well in front of middle of lateral eyes. Anterior median eyes with diameter exceeding that of the laterals in about ratio 13:11; their radius apart and closer to the laterals. Posterior lateral eyes a little smaller than the anterior laterals, from which they are separated by much less than their diameter. Posterior median eyes elliptic; subcontiguous with the laterals which are only slightly larger.

¹ Νησιώτης, an islander.

The plumose bacilliform bristles of the stridulating organ occurring on coxae of palpus and first legs as well as on the trochanters as usual. No plumose hairs are present on the anterior surface of leg I.

Metatarsus I and II scopulate to base, III to middle, and IV only at distal end.

Leg I in the male with the metatarsus straight. Inferior process of tibia long and of moderate slenderness, curving away from joint and then more strongly dorsad; the metatarsus when joint is flexed closes against the adaxial surface of tip of this process. Superior tibial process much shorter and proportionately stouter than the inferior one toward which it is slightly bent, relatively considerably shorter than the corresponding process in *P. cancerides*.

Tibia of the palpus in the male moderate in thickness, narrowest distad; bearing on ectal side a broad, low, and rounded tubercular elevation which is proportionately larger than that in *P. cancerides*, but is considerably less conspicuous than that in species of *Acanthoscurria*. Spine of bulb of palpal organ long, uniformly narrowing toward tip, curving rather strongly but evenly toward distal end, smooth.

Male (type).—Length, 35 mm.

Cephalothorax: length, 18.2 mm.; width, 17 mm.

	fem.	tib. +pat.	met.	tar.	total
Leg I	16 mm.	20 mm.	13.2 mm.	8.6 mm.	57.8 mm.
Leg II	15	19.2	13	—	—
Leg III	13	17	14	7.2	51.2
Leg IV	16	20.3	19	8	63.3

Female.—Length, 36 mm.

Cephalothorax: length, 17.5 mm.; width, 15.6 mm.

	fem.	tib. +pat.	met.	tar.	total
Leg I	13.7 mm.	18 mm.	9.3 mm.	6 mm.	47 mm.
Leg II	13	16.2	9.3	6	44.5
Leg III	11.7	15.2	10.8	6	43.7
Leg IV	14	18.3	15	6.3	53.6

This species is like *P. cancerides* (Latr.) in lacking plumose hairs on the anterior surface of femur I; but it is a much smaller species and in the male differs in having metatarsus I straight instead of conspicuously bowed; in the smaller proportionate length of the upper tibial process; in the more marked tubercle on tibia of palpus; etc.

PHORMICTOPUS MELODERMA,¹ sp. nov.

Type.—M. C. Z. 85. ♀. West Indies?

Integument of entire carapace, sternum, chelicerae, palpi, and legs when dry a dense black, when in alcohol showing in parts a faint reddish tinge. Ventral surface of endites along mesal half reddish or pink. Pubescence brown with a little grey intermixed; the light stripes across ends of joints above very narrow. Bristles of legs and abdomen reddish brown.

Anterior row of eyes procurved in such degree that a line tangent to anterior edges of the median eyes passes through or a little behind middle of surface of lateral eyes. Anterior median eyes with diameter only four fifths that of the laterals; four fifths their diameter apart and closer to, about three fifths their diameter from, the laterals. Posterior lateral eyes with diameter about four fifths that of the anterior ones, separated from the latter by about two thirds their diameter or by radius of anterior eye. Posterior median eyes about equal to the laterals; nearer to lateral eye than to anterior median eye of same side.

Sternum longer than wide in ratio 12.2 : 10.8; but weakly convex.

Stridulating bristles on coxa I long, plumose, somewhat clavate, in type 5 in number. Stridulating bristles on coxa of palpus of the same form, 6 or 7 in number.

No plumose hairs on anterior surface of femur I.

Metatarsus of legs I and II scopulate to base or very nearly so; metatarsus III scopulate three fourths the length toward base; and metatarsus IV scopulate for only about one fifth of length at distal end.

Female (type).—Length, 60 mm.

Cephalothorax: length, 27 mm.; width, 24.2 mm.; width at level of eyes, 16.5 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	20 mm.	26.2 mm.	13.6 mm.	8.6 mm.	68.4 mm.
Leg II	19	24	13.2	9	65.2
Leg III	17	21.5	15.2	9.2	62.9
Leg IV	20	25.3	21	10	76.3

¹ μέλας, black, dusky, δέρμα, skin, integument.

PHORMICTOPUS PLATUS,¹ sp. nov.

Type.—M. C. Z. 85. ♀. Florida: Tortugas. J. B. Holder.

Paratype.—M. C. Z. 84. ♀. Florida: Tortugas. J. B. Holder.

Integument of cephalothorax and legs when dry black or nearly so, a weak reddish tinge becoming evident when in alcohol; that of endites beneath pinkish. Pubescence brown with a lesser amount of grey intermixed. Bristles as usual.

Eye-tubercle high and convex. Anterior row in dorsal view nearly straight; a line tangent to anterior edges of median eyes passes through anterior fourth of the laterals. Anterior median eyes equal in diameter to the lateral ones; their radius or slightly more apart, closer to the lateral eyes. Posterior lateral eyes slightly smaller than the anterior laterals from which they are removed by a distance equal to their radius. Posterior median eyes closer to the lateral eyes than to the anterior medians situated much as in *P. cancerides*. A line tangent to caudal edges of the two posterior eyes on each side passes much behind anterior median eye of the opposite side.

Plumose hairs on femur I more slender and relatively longer and more prone in habit than in *P. eubensis*; fewer in number and with simple hairs intermixed.

Female (type).—Length, 52 mm.

Cephalothorax: length, 22.5 mm.; width, 20.2 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	16 mm.	22.7 mm.	13.2 mm.	7.3 mm.	59.2 mm.
Leg II	15.6	21	13	7	56.6
Leg III	14.3	19	13.7	6.7	53.7
Leg IV	17	22.5	17.2	7.3	64

A second female from the Tortugas, probably the same species differs in having proportionately smaller legs with the cephalothorax somewhat exceeding in length tibia + patella I and tibia + patella IV; its anterior row of eyes is a little more procurved and the posterior median eyes are a little farther forward; but these differences are probably due to individual variation.

This species is like *P. eubensis* and *P. cautus* in having plumose hairs on the femur of leg I; but these hairs are fewer and more slender than in *P. eubensis* and do not form so dense a scopula, not extending

¹ πλατύς, broad.

distad beyond middle of joint. The pars cephalica is more depressed and the cephalothorax proportionately wider. The type also differs from *P. cubensis* in having the cephalothorax equal in length to tibia + patella IV, not distinctly and considerably longer though exceeding these joints a little in the second female mentioned above.

ACANTHOSCURRIA NATALENSIS, sp. nov.

Type.—M. C. Z. 88. ♀. Brazil: Rio Grande do Norte; Natal. Stanford 1911 Exped. to Brazil. W. M. Mann.

Integument of carapace, sternum, legs, palpi, and chelicerae very light chestnut. Carapace and sternum clothed with a dense coat of velvety brown pubescence. Legs clothed chiefly with similar pubescence but grey abundant and predominating on ventral surface of the femora; ends of joints above with the usual very narrow fringe of cream-colored hairs. Bristles numerous, long, rust-brown in color. Abdomen very densely clothed with dark mouse-colored pubescence which is somewhat lighter beneath; the usual long rust-brown bristles above and laterally.

Pars cephalica relatively high, convex.

Anterior row of eyes only weakly procurved, a line tangent to anterior margins of median eyes passing considerably in front of middle of lateral eyes. Anterior median eyes with diameter scarcely differing from the long diameter of the laterals which are elliptic; their diameter apart but only about two thirds their diameter from the laterals. Posterior lateral eyes equalling the anterior ones or scarcely smaller, from these being separated by about their radius. Posterior median eyes small, about two thirds the diameter of the laterals to which they are closer than to the anterior medians.

Spinules on labium and endites of usual form and arrangement.

Sternum of moderate convexity.

Metatarsi I and II scopulate very nearly to base; metatarsus III scopulate from one half to two thirds of its length; and metatarsus IV not at all scopulate.

Female (type).—Length, 48 mm.

Cephalothorax: length, 19.25 mm.; width 16.2 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	13.2 mm.	17.7 mm.	9.2 mm.	5.2 mm.	45.5 mm.
Leg II	12	16	8.2	5.2	41.4
Leg III	11	14	10	5.3	40.3
Leg IV	13	17	14	5.6	49.6

Distinct especially in the proportionate sizes and distances of the eyes; in the more strongly elevated pars cephalica; the complete absence of scopula from metatarsus IV, etc.

ACANTHOSCURRIA CURSOR,¹ sp. nov.

Plate 4, fig. 10.

Type.—M. C. Z. 92. ♂. Brazil: Ceará; Maranguape Mts. Stanford 1911 Exped. to Brazil. W. M. Mann.

Paratype.—M. C. Z. 90. ♂. Brazil: Ceará; Maranguape Mts. Stanford 1911 Exped. to Brazil. W. M. Mann.

Integument of cephalothorax and legs dark chestnut, in parts almost blackish. Pubescence of body in general dark mouse colored, grey intermixed especially on ventral surfaces of femora as usual. Bristles rufous brown, those forming the fringes on endites and chelicerae brighter red. The whitish fringe across distal ends of joints above very narrow. Darker than in most species of the genus.

Anterior row of eyes weakly procurved, a line tangent to anterior edges of median eyes in dorsal view passing a little in front of middle of laterals. Anterior median eyes with diameter clearly and considerably less than that of the laterals (ratio cir. 13:17); less than their diameter apart (10:13), closer to the laterals. Posterior lateral eyes slightly larger in long diameter than the anterior lateral ones (13:12). Posterior median eyes very close to the laterals and also to the anterior medians from which they are but little farther removed.

Anterior surface of femur I with plumose hairs over entire length, these becoming more and more numerous proximad, sparse distad; plumose hairs similarly occurring over entire length of caudal surface of femur of palpus.

Tibial process of leg I in the male large, diverging more than in *A. fracta* and larger and proportionately narrower than in *A. minor*; distally presenting 9 or more closely appressed spinous divisions.

Tibia of palpus of male moderately enlarged, narrowed distad; ectal tubercle low and stout, acute, triangular in outline with the anterior and caudal sides straight; higher than in *A. minor*. Spine of bulb much longer than in *A. minor*, without the conspicuous spiral carinal elevation; a single short spinous tip with a moderate rounded bulging plate

¹*cursor*, a runner.

at its base as shown in the figure but not truly bifid and not at all retrorse as in *A. geniculata*.

Male (type). Length, 38 mm.

Cephalothorax: length, 19 mm.; width, 17 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	18 mm.	23.2 mm.	14.2 mm.	8 mm.	63.4 mm.
Leg II	16.7	21	13.2	8	58.9
Leg III	14.2	18	14.5	7.4	54.1
Leg IV	17	21	19.5	9	66.5

ACANTHOSCURRIA FRACTA,¹ sp. nov.

Plate 5, fig. 1.

Type.—M. C. Z. 87. ♂. Brazil: Pará; Pará. Nathaniel Thayer Exped.

Integument of cephalothorax and appendages chestnut with the reddish element pronounced. Pubescence of entire body dense and velvety, mouse colored, more greyish on ventral surface of femora especially. Bristles numerous, rust-brown.

Anterior row of eyes procurved in such degree that a line tangent to anterior edges of median eyes passes through or very near to middle of the laterals. Anterior median eyes slightly smaller than the laterals (diameters as 16:17); scarcely three fourths their diameter apart and not fully their radius from the laterals. Posterior lateral eyes with diameter only about three fourths that of the anterior ones. Posterior median eyes with long diameter about equal to that of the anterior medians; very close to lateral eyes, farther from the anterior medians.

Labium and endites of palpi as usual.

Metatarsus I scopulate very nearly to base; II scopulate about five sixths of length; III about one half of length; and metatarsus IV less densely scopulate only at distal end.

Process on tibia I in the male curving and distally becoming parallel with axis of joint; in the type the process is distally partite with four long stout acute teeth with dorsad of these and also on mesal surface a number of stiff bristle-like bodies as shown in figures.

Tibia of palpus of male inflated, moderately narrowing distad; its exterior tubercle stout, short, with anterior edge concave and the

¹ *frango*, break.

posterior edge distally convex so that the apex appears slightly bent forward. Bulb globose; spine short, at apex with a short acute point at the base of which is a semicircular, disc-like carinal elevation in place of the somewhat retrorse process in *A. geniculata*, proximally with a slightly raised spiral edge.

Male (type). Length, 50 mm.

Cephalothorax: length near, 21 mm., its broken condition making more than an approximation impossible.

	fem.	tib. + pat.	met.	tar.	total
Leg I	21 mm.	28.5 mm.	18.7 mm.	10 mm.	78.2 mm.
Leg II	20	26	17	9.5	72.5
Leg III	18	22.1	18.5	9.3	67.9
Leg IV	20.2	26.3	23.6	9.8	79.9

This species is like *A. geniculata* in having numerous plumose hairs over entire length of femur I on the anterior side. From that species it differs in the male palpal organ and in having the white stripe across ends of joints narrower, etc.

ACANTHOSCURRIA DUBIA,¹ sp. nov.

Type. M. C. Z. 93. ♀. Habitat unknown.

Carapace dark chestnut, clothed densely with intermingled grey and reddish brown pubescence. Chelicerae with similar pubescence, the grey prevailing above, and in addition with numerous long reddish bristles along mesal part of dorsal surface and over entire anterior surface above base of claws; bristles of the fringe reddish. Sternum chestnut densely clothed with brown pubescence and longer brown bristles. Legs densely clothed with velvety grey and brown pubescence intermixed and very numerous long rufous bristles. The bristles, especially on patellae and tibiae, tend to be absent from longitudinal stripes (paired) which in consequence appear as lighter grey streaks. Ends of joints above with lighter transverse narrow band of hair. The abdomen with the usual dense velvety coat of pubescence, brown with much grey intermixed; numerous long rufous bristles above and laterally.

Cephalothorax longer than tibia + patella I; a little narrower than tibia + patella IV.

¹ *dubius*, doubtful.

Sternum a little longer than wide (11:10).

Labium and endites with the spinules as usual.

Ocular tubercle convex. Anterior row of eyes only weakly pro-curved a line tangent to anterior edge of median eyes running clearly in front of the middle of the lateral eyes. Anterior median eyes subequal to the laterals; less than their diameter apart and from the lateral on each side. Posterior lateral eyes a little smaller than the anterior laterals. Posterior median eyes but little smaller than the posterior laterals to which they are a little closer than to the anterior medians.

Metatarsi I and II scopulate densely to base; metatarsus III scopulate a little more than half its length; metatarsus IV scopulate only at very distal end.

Femur I with some plumose hairs on anterior side proximally but none detected on ectal side of femur of palpus. Bacilliform spines of stridulating organ on trochanter of palpus very numerous.

Female (type).—Length, 55 mm.

Cephalothorax: length, 25.5 mm.; width, 22 mm.; width across anterior end 15 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	17.5 mm.	23.8 mm.	12.3 mm.	7 mm.	60.6 mm.
Leg II	16	21.5	11.7	7	56.2
Leg III	14.5	19	14	7.6	55.1
Leg IV	18	23	18	8	65

SELENOCOSMIA KULLUENSIS, sp. nov.

Plate 5, fig. 2, 3.

Type.—M. C. Z. 94. ♂. India: Kullu Valley. M. M. Carleton.

Integument of cephalothorax and legs chocolate-brown. Pubescence of legs in general lighter yellowish brown; the patellae clothed with white or greyish hairs a stripe of which also encircles tibiae at proximal end. Pubescence of cephalothorax dense; in large part light grey in color, this being most abundant cephalad, also occurring over part of chelicerae. Sternum and coxae of legs ventrally lighter brown. Abdomen above light brown with hairs yellowish brown; venter a deeper chocolate-brown. The fringes on endites and chelicerae rufous.

Labium with a dense band of spinules across distal border. Coxae of palpi with similar spinules over proximomesal corner.

Cephalothorax low. Pars cephalica but little elevated. Fovea thoracic short, lunate.

Anterior row of eyes very weakly procurved, a line tangent to median eyes passing through anterior fifth of lateral eyes. Median eyes smaller than the lateral, the ratio of diameters being nearly as 7:8; nearly four sevenths their diameter apart while only little more than one third their diameter from the laterals. Posterior row of eyes recurved. Posterior lateral eyes smaller than the anterior laterals, the ratio of diameters being about as 25:34; three fourths their diameter from the anterior laterals. Posterior median eyes very long and narrow, longer than greatest diameter of the laterals; very close to the laterals, clearly farther from the anterior medians.

Bacilliform spines of stridulating organ on coxa of pedipalp densely grouped in an elongate ovate area of which the narrower end is distad. The stridulating spines on the chelicera are arranged in an area adjacent to the fringe for the entire length of which they extend, the spines decreasing in length and increasing in density toward dorsal or ectal edge of the area.

Tibia + patella IV in male shorter than tibia + patella I; both considerably longer than the cephalothorax.

Tibia I in male unmodified as usual.

Male (type). Length, 39 mm.

Cephalothorax: length, 18 mm.; width, 15.5 mm. .

	fem.	tib. +pat.	met.	tar.	total
Leg I	15 mm.	22 mm.	11 mm.	6.5 mm.	54.5 mm.
Leg II	13.5	19	10.3	6	48.8
Leg III	12	16	11	6	45
Leg IV	15	20.5	16	6.5	58

In coloration close to *S. himalayana* Pocock. It agrees with this form and differs from other known Indian species in having the patellae and cephalothorax covered with greyish hairs, the patellae contrasting sharply in color with other joints of legs. The present species seems to be a decidedly larger one than *S. himalayana* and the anterior row of eyes are procurved though not strongly so, instead of straight. The scopula of tarsus IV in *S. himalayana* is divided whereas it is entire in the present species excepting at very proximal end. Unfortunately the type of *S. himalayana* is a female, that of *S. kulucensis* a male, so that detailed comparisons cannot be made.

MELOGNATHUS,¹ gen. nov.

Anterior row of eyes distinctly procurved, with the median eyes clearly larger than the lateral. Posterior median eyes smaller than the lateral.

Fovea thoracica short; transverse. Cephalothorax low; pars cephalica scarcely elevated, not convex.

Vibratile bristles of stridulating organ on the chelicera few, in a series a little ectad of and parallel with the oral fringe, bacilliform. The stridulating spines of the opposite adjacent surface of coxa of pedipalp below suture arranged in two definite series close to and parallel with the suture, not at right angles to it as in *Thrigmopoeus*; those above the suture few, smaller, and scattered among plumose bristles (Plate 5, fig. 6).

All tarsi scopulate with no trace of a dividing setose band in the scopulae. Metatarsi of anterior legs scopulate nearly to base; metatarsi III and IV scopulate only at distal end. Metatarsi of posterior legs armed at distal end both above and below with stout spines. Tibia + patella I decidedly longer than tibia + patella IV.

Tibia I in the male is armed at distal end with a stout process which is curved and spinulose.

Type Species.—*Melognathus dromeus*, sp. nov.

MELOGNATHUS DROMEUS,² sp. nov.

Plate 5, fig. 4-7.

Type.—M. C. Z. 96. ♂. East Indies? Philippines? J. M. Barnard. Ship MONSOON.

Integument of cephalothorax and appendages reddish or chestnut; that of the abdomen brown. Pubescence of the body throughout dense; yellowish brown or light rust colored.

Cephalothorax low and flat; the pars cephalica not elevated. Fovea thoracica transverse, shorter than the width of the eye-area.

Eye-area twice as wide as long. Anterior row scarcely longer than the posterior one; strongly procurved in dorsal view. Anterior median eyes distinctly larger than the laterals. Eyes of the second

¹ μέλας, black, γνάθος, jaw.

² δρομέος, a runner.

row much the smallest, with the median smaller than the lateral. Posterior median eyes a little farther from anterior medians than from posterior laterals.

Sternum equal in length and breadth.

Labium densely spinulose over distal half.

Coxae of pedipalps densely spinulose over proximomesal portion.

Process of tibia I in the male large; curved dorsad; the convex surface densely clothed with short spines.

Male (type). Length of cephalothorax 15.5 mm.; width, 14.5 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	22.5 mm.	28 mm.	15 mm.	8.8 mm.	74.3 mm.
Leg II	20	24	13.75	8.2	65.95
Leg III	—	—	—	—	—
Leg IV	19	23	17	7	66

POECILOThERIA BARA,¹ sp. nov.

Type.—M. C. Z. 95. ♀. Ceylon. F. Layard.

Carapace chocolate-brown. Abdomen dorsally with a yellow hastate band, the sides of which are deeply wavy and bordered with black from which there are indications of black stripes extending obliquely across sides of the abdomen as in several related forms; the hastate band is bisected longitudinally with a dark stripe. Ventral surface of abdomen, coxae, and trochanters of legs and sternum deep chocolate. Femora of legs with a white band of hair across distal end above; patellae with a broad white band across proximal end and a much narrower one at distal end; tibiae with a relatively narrow band of white across each end; metatarsi each with a white band at proximal end, a broader one at distal end, and, extending between the two, a narrow, obliquely longitudinal stripe of same colored hair.

Fovea thoracica short; transverse or very slightly recurved.

Female (type).—Length, 60 mm.

Cephalothorax length, 30 mm.; width, 24 mm.

	fem.	tib.+pat.	met.	tar.	total
Leg I	22 mm.	31 mm.	17 mm.	8 mm.	78 mm.
Leg II	22	30	18	8	76
Leg III	19.5	24	16	7	66.5
Leg IV	22.7	28	21	8	79.7

¹ βαρῆς, heavy.

DIPLURINAE.

TRYSSOTHELE AUSTRALIS,¹ sp. nov.

Plate 5, fig. 8.

Type.—M. C. Z. 113. ♀. Chile: Talcahuano. Hassler Exped.*Paratypes*.—M. C. Z. 114. One ♀, three immature ♀ ♀. Chile: Talcahuano. Hassler Exped.

Integument of carapace, sternum, legs, and pedipalps chestnut; that of the chelicerae black. Integument of abdomen black; dorsum crossed by four pairs of oblique light yellowish or testaceous stripes which do not meet at the median line. Pubescence of the carapace light brown of golden lustre; that of the legs similar but more brown. Spinnerets black. Fringe of endites and chelicerae brick-red.

Ocular area near twice as wide as long (40:21).² Anterior row of eyes in dorsal view straight or very nearly so. Anterior median eyes considerably smaller than the lateral, the ratio of diameters being about 2:3.; two thirds their diameter apart, and but half as far from the laterals. Posterior lateral eyes as large as the anterior laterals; lateral eyes on each side very close together, almost contiguous. Posterior median eyes with diameter two thirds that of the laterals, subcircular or but slightly elongate, nearer to the laterals than to the anterior medians.

Metatarsi I and II scopulate to base; metatarsus III scopulate only at end; and metatarsus IV not at all scopulate. Metatarsus II, in addition to apical spine beneath, with a pair of spines proximad of middle and one at the base. Numerous spines on metatarsi III and IV. Patella III armed with a spine on the anterior surface.

Female (type). Length, 22 mm.

Cephalothorax: length, 10.3 mm.; width, 8.1 mm.; length of pars cephalica, 6 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	7 mm.	10.1 mm.	4.8 mm.	3.4 mm.	25.3 mm.
Leg II	6.4	9.2	4.2	3.4	23.2
Leg III	6	8	5.8	3.3	23.1
Leg IV	7.8	10.2	8	4.25	30.25

¹ *australis*, southern.² On one side in the type specimen the two lateral eyes are coalesced and the area on that side thus shorter, the ratio to the width being only 7:15.

BRACHYBOTHRIINAE.

BRACHYBOTHRIUM PUGNAX,¹ sp. nov.

Type.—M. C. Z. 115. ♀. Arizona: Tucson. Charles Bendire. Carapace and legs light brown of dilute chestnut tinge. Chelicerae dusky chestnut. Sternum and coxae of legs beneath dusky brown. Abdomen light brown, dusky especially beneath; spinnerets yellowish.

Pars cephalica rather low, with the posterior declivity somewhat flattened; in profile moderately convex. Fovea thoracica short, very deep, radiating lines fine, more or less ramose and in part reaching the fovea.

Anterior median eyes with centers on or near the middle transverse line of ocular area; very close to and not much differing in size from the posterior median eyes.

Chelicerae moderate; the cephalothorax about two and a half times longer than their anteroposterior length. Rastellum composed of a moderate number of long, stout, distally curved spine-like teeth.² Hairs long and numerous on elevation at mesal side of the convex surface.

The femur of the palpus is conspicuously compressed laterally; the tibia is ventrally flattened over the distal portion, narrowed distad; tarsus similarly flattened and depressed at distal end beneath so that the more proximal portion protrudes as a lobe; tibia and tarsus strongly spined. Claw with four teeth.

Metatarsus I produced ventrad into a conspicuous, basally long and distally angular lobe a little proximad of middle, with a lower, keel-like edge extending from this lobe to the distal end of the joint; the lobe clothed with long fine hairs. Tibia I with a ventral ridge conspicuously highest near middle as in the metatarsus; on the tibial lobe are borne 5 or 6 long black spines in 2 series (2 + 3 or 2 + 4, the larger number being in the series on the mesal or anterior side).

Distal article of the superior spinnerets longer and clearly more slender than the median one.

Female (type). Length, 13 mm.

Cephalothorax: length, 7 mm.; width, 6 mm.

¹ *pugnax*, pugnacious.

² No rastellum proper is present on the left chelicera in the type, though strongly developed on the right one. The left chelicera is smaller also.

	fem.	tib. +pat.	met.	tar.	total
Leg I	6 mm.	6.5 mm.	4.6 mm.	3.5 mm.	20.6 mm.
Leg II	5.2	5.5	4	2.5	17.2
Leg III	5.2	5.6	4.5	3.1	18.4
Leg IV	6.2	6.7	6.3	3.1	22.3

BRACHYBOTHRIUM HAGENI, sp. nov.

Plate 5, fig. 9.

Type.—M. C. Z. 116. ♂. Washington: Colville Valley; Loon Lake, 25 July, 1882. Samuel Henshaw.

Cephalothorax and legs brown of a dilute chestnut cast, the coxae of the legs ventrally dusky; palpi paler than the legs. Area between eyes blackish. Abdomen light or yellowish brown; dusky ventrally and over sides, leaving a slightly paler area above which is more or less broken into three spots. Spinnerets yellowish.

Posterior declivity of pars cephalica nearly straight, descending directly from the eyes to the fovea thoracica. The longitudinal fovea thoracica sharply impressed; radial lines distinct.

Eye-tubercle convex; moderate. Anterior median eyes as usual greatly smaller than the lateral, a little exceeded by the posterior median ones.

Chelicerae rather small; near middle of convex, anterodorsal, surface conspicuously elevated at mesal side and bearing a dense growth of long stout bristles.

Labium and the coxae of pedipalps not spinulose.

Tarsi of legs all slender, conspicuously curved or bent a little distad of middle. Spines of metatarsi long and slender, numerous. Claws armed with 6 or more teeth.

Tibia I subcylindric or very slightly clavate distad; on anterior side over middle third of length with a dense patch of long slender spines and a similar area on the posterior or ectal side covering an area between middle or a point a little distad of middle and the distal end; also bearing numerous longer and shorter black hairs. Proximal half of tibia II more slender than the distal.

Femur of palpus in the male long and slender, curved, laterally somewhat compressed. Patella moderate, much shorter and more slender than the tibia; 1.8 times longer than thick. Tibia thick, elongate, rounded at ends; about 2.65 times longer than thick and

1.8 times longer than the patella. Tarsus short, subhemispherical. Bulb of palpal organ subglobular or somewhat pyriform; spine stout, strongly curved, bifid toward end, showing on the mesal side a distally broadly rounded division with edge and surface finely denticulate or tuberculated, and on the ectal side an acutely pointed longer process.

Male (type). Length, 13 mm.

Cephalothorax: length, 6.4 mm.; width, 5.3 mm.

	fem.	tib. + pat.	met.	tar.	total
Leg I	5.6 mm.	6.6 mm.	4.1 mm.	2.8 mm.	19.1 mm.
Leg II	5	5.7	4	3	17.7
Leg III	4.8	5.2	4.5	3.2	17.7
Leg IV	5.6	6.6	6.1	3.2	21.5

Readily distinguished from *B. pacificum* Simon, also described from Washington, in having a dense patch of spines on both inner and outer surface of tibia I of male instead of only on the inner (anterior) surface, as well as in presenting pronounced differences in the palpal organ. From *B. robustum* Simon, which it seems most to resemble, it differs, among other points, in the palpal organ and in the modifications of leg I.